

Proposed Rubric for Evaluating Alternative Schools Under AZ LEARNS

Arizona State Board of Education Information Packet August 30, 2003

On August 30, 2003, the Arizona Department of Education (ADE) will present to the Arizona State Board of Education (Board) a proposed methodology for calculating an AZ LEARNS achievement profile for alternative schools. This methodology will be applied to Arizona public elementary and secondary schools, including charter schools, classified as alternative schools in order to determine school classifications by October 15, 2004 as required by A.R.S. §15-241 (Arizona LEARNS). The purpose of this document is to describe the proposed evaluation methodology to the Board.

Alternative schools are defined as schools that meet the Board-approved definition. Alternative schools are defined as schools whose sole and clearly-stated mission is to serve specific populations of at-risk students. Alternative school status is granted by application to the ADE. A.R.S. §15-241 makes an allowance for a “parallel” evaluation method for alternative schools. When AZ Learns achievement profiles were first issued in 2002 the Board determined that alternative schools would not receive an achievement profile using the conventional AZ LEARNS methodology, and that ADE should develop an alternate method for evaluating these schools.

As mandated by A.R.S. §15-241, the ADE in collaboration with members of the education community developed the proposed evaluation methodology according to research-based principles. Upon adoption by the Board, the ADE will produce a technical report detailing the achievement profile methodology, including specific formulas and supporting documentation.

I. GENERAL PROCESS TO PRODUCE THE ACHIEVEMENT PROFILES

The small number and wide variety of alternative schools makes it difficult to develop reliable parameters for measures of school performance. Consequently, a single method of evaluating alternative schools was created that employed performance measures available to the majority of schools. In plainer terms, it would be too inaccurate to develop separate methods for large alternative high schools, small alternative high schools, alternative middle schools, and small alternative middle schools. Given the small number of schools in each category, benchmark performances and expectations would be very unreliable. Consequently, ADE has developed a single rubric to evaluate all alternative schools.

The method for calculating an achievement profile for alternative schools is as follows:

- A. AIMS scale score points will be calculated using a baseline score only. The baseline is calculated by aggregating test scores backward across years starting from the most current year. Aggregation is carried out until a group size of 32 is attained or the year 2000, whichever comes first. The percent of students passing AIMS in this aggregate group is then compared to the baseline grouping scale for the relevant subject/grade. The group then receives baseline points based upon which baseline group it is in.
- B. Added evidence points will not be included in the achievement profile for alternative schools. Because most alternative schools below the high school level are quite small and have highly mobile populations, there would be little or no students in the Measure of Academic Progress analysis. Consequently, the MAP analysis would be highly volatile and inaccurate.
- C. Points based on an alternative school's dropout rate will be calculated as for all other schools.
- D. As with other schools, alternative schools will receive one scale score point if they make AYP for the current year.
- E. Alternative schools will only receive labels of "performing" and "underperforming."
- F. Because of the uncertainty of measurement associated with small sample sizes and the high stakes of school labels, schools initially determined to be underperforming will receive a "second look." Instead of determining baseline groups based on the mean percent of students passing AIMS, an alternate baseline group for these schools will be determined based on the upper bound of a 95 percent confidence interval around the mean. If a school initially determined to be underperforming moves to a higher classification due to the "second look," that school will receive a "performing" label.

II. DEFINITION OF AN ALTERNATIVE SCHOOL

The following is the definition of an alternative school as approved by the Board in 2002. There are currently 118 schools that have been granted alternative school status.

1. A school operated by a school district must have adopted a mission statement that clearly identifies its purpose and intent to serve a specific student population (please see criterion #3) that will benefit from an alternative school setting. A charter school must be expressly chartered to serve a specific student population that will benefit from an alternative school setting.
2. The educational program and related student services of the school must match the mission or charter of the school.

3. The school must intend to serve students exclusively in one or more of the following categories:
 - Students with behavioral issues (documented history of disruptive behavior)
 - Students identified as dropouts
 - Students in poor academic standing who are either severely behind on academic credits (more than one year) or have a demonstrated pattern of failing grades
 - Pregnant and/or parenting students
 - Adjudicated youth
4. Any school offering secondary instruction for academic credit used to fulfill Arizona State Board of Education graduation requirements (in part or in full) must offer a diploma of high school graduation.

III. CALCULATION OF AIMS SCALE SCORE POINTS FOR ALTERNATIVE SCHOOLS

Many alternative schools would also qualify as extremely small schools. As discussed above, the small number of alternative schools makes it problematic to develop valid and reliable evaluation methods for small samples. Furthermore, each distinct evaluation method required—for large and small alternative schools, for example—places an additional burden on ADE resources. Therefore, ADE proposes that the method for calculating AIMS scale score points for alternative schools be the same as for extremely small schools.

The method is as follows:

- A. For each subject grade combination, an evaluation group is created by aggregating usable test scores across years starting in the most current year. Scores are added to the group until: 1) A group size of 32 is reached, or 2) Data for all available years is reached.
- B. For each evaluation group, the percent of students who passed AIMS is calculated.
- C. The percent passing for each evaluation group is compared to the AZLEARNs cutpoints for baseline groups. The cutpoints used for alternative schools will be the same as for other schools. This allows for consistent comparison of student performance across all schools in the state.
- D. Each subject/grade combination is awarded scale score points based on the baseline group it is in.

Example.

Table 1 below shows the number of usable tests for 10th grade math for two different schools.

Table 1. Number of Usable Tenth Grade Reading Tests for Two Schools						
School	2000	2001	2002	2003	2004	Total Group Size
A	14	15	13	12	15	40
B	4	5	6	6	5	26

Applying the methodology described above, for each school we form an evaluation group by counting backward from the most current year until either we achieve a group size of 32 or use all the available data. The years of data used for each school are shown in **boldface**. For school A this results in a group of 40 students from the years 2002, 2003, 2004. For school B, we must use all the years of available data back to 2000.

The next step is to examine the percent of students passing in the groups we have formed. Table 2 shows the number of students who passed in the groups from Table 1. Again for school A we consider only the most recent three years while for school B we consider five years.

Table 2. Number of Students Passing AIMS								
School		2000	2001	2002	2003	2004	Total	% Pass
A	# Pass	NA	NA	1	0	5	6	15
	# Tested	NA	NA	13	12	15	40	
B	# Pass	0	1	0	0	0	1	4
	# Tested	4	5	6	6	5	26	

For school A, 15 percent of the students in the evaluation group have passed AIMS. Comparing this to the cutpoints for baseline groups approved last year by the Board (Table 3) we see that this puts tenth grade math for school A in baseline grouping 3, earning the school 3 scale score points.

For school B, 4 percent of students in the evaluation group have passed AIMS. Comparing this to the cutpoints for baseline groups (Table 3) we see that this puts tenth grade math school B in baseline grouping 2, earning the school 2 scale score points.

Table 3. Baseline Groupings

Grade	Subject	Baseline Grouping 1	Baseline Grouping 2	Baseline Grouping 3	Baseline Grouping 4	Baseline Grouping 5	Baseline Grouping 6
3	Math	0% - 26%	27% - 40%	41% - 56%	57% - 71%	72% - 82%	83% - 100%
3	Reading	0% - 46%	47% - 59%	60% - 73%	74% - 84%	85% - 91%	92% - 100%
3	Writing	0% - 54%	55% - 67%	68% - 79%	80% - 89%	90% - 94%	95% - 100%
5	Math	0% - 11%	12% - 21%	22% - 36%	37% - 52%	53% - 66%	67% - 100%
5	Reading	0% - 31%	32% - 44%	45% - 60%	61% - 75%	76% - 85%	86% - 100%
5	Writing	0% - 25%	26% - 38%	39% - 53%	54% - 68%	69% - 79%	80% - 100%
8	Math	0% - 1%	2% - 5%	6% - 12%	13% - 22%	23% - 34%	35% - 100%
8	Reading	0% - 25%	26% - 37%	38% - 51%	52% - 66%	67% - 77%	78% - 100%
8	Writing	0% - 18%	19% - 28%	29% - 42%	43% - 56%	57% - 68%	69% - 100%
H.S.	Math	0% - 3%	4% - 8%	9% - 19%	20% - 33%	34% - 47%	48% - 100%
H.S.	Reading	0% - 28%	29% - 42%	43% - 58%	59% - 73%	74% - 83%	84% - 100%
H.S.	Writing	0% - 16%	17% - 25%	26% - 39%	40% - 53%	54% - 66%	67% - 100%

BOARD ACTION:

- (A) The ADE recommends that the Board adopt the methodology for calculating the AIMS scale score points for alternative schools described above.

IV. CALCULATION OF AN ACHIEVEMENT PROFILE FOR AN ALTERNATIVE SCHOOL

In addition to AIMS scale score points, alternative schools also earn scale score points via their dropout rates and their current AYP status. The methods used to calculate scale score points earned by alternative schools for these performance measures will be the same as the methods used for other schools approved by the Board on September 16, 2003.

Figures A and B give a graphical summary of the method for evaluating alternative schools at the elementary and high school levels.

- A school may receive up to six scale score points (calculated using the method described in III) for each subject/grade combination it serves. This is represented by the far left column in each figure.
- A school may receive one point if it has made adequately yearly progress (AYP) under the methodology mandated by the No Child Left Behind Act. This is represented by the column second-from-left in each figure.
- If a school is a high school it may receive one point based on its dropout rate. This is the third-from-left column in Figure B.

- The total points earned by a school are added up and compared to the school classification scale to determine a school's preliminary classification—the final column in Figures A and B.

Figure A. Method for Evaluating Alternative Schools (358)

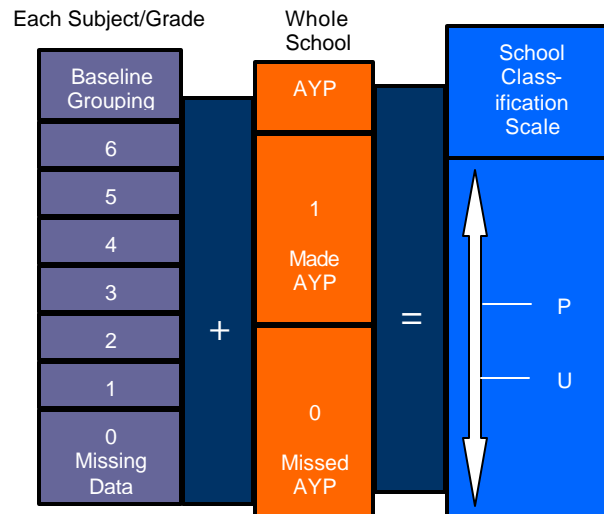
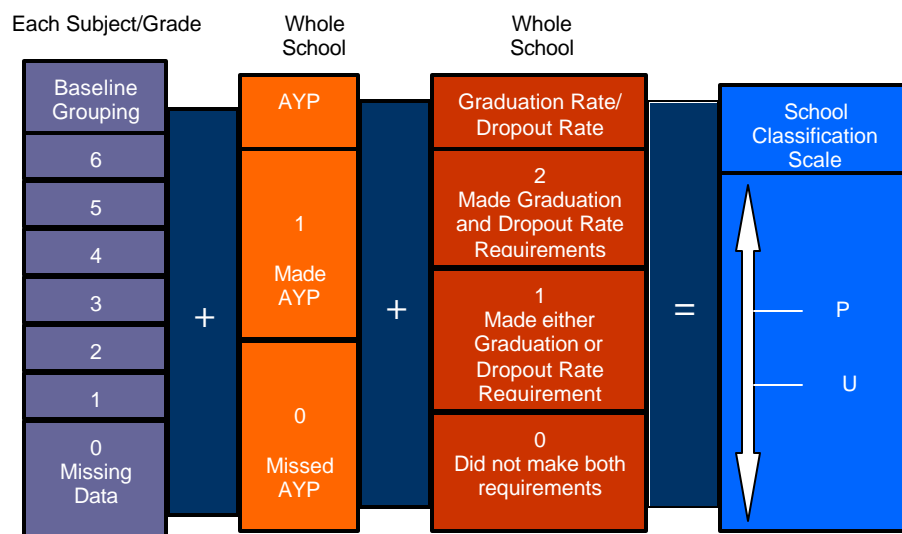


Figure B. Method for Alternative Schools (High Schools)



- **“Second look” for alternative schools.** Because of the high-stakes consequences of being labeled an “underperforming” school, and because of the uncertainty of measurement involved with small sample sizes, the ADE believes it is prudent to give alternative schools a “second look” if they face the possibility of receiving an “underperforming” label. If the preliminary label of an alternative school is “underperforming,” then the AIMS scale score points for that school will be recalculated. For each subject/grade combination, the upper bound of the 95-percent confidence interval will be used to calculate to which baseline group the school belongs. If the recalculated points move the school into a higher classification, the school will receive a “performing” label.

BOARD ACTION:

- (B) The ADE recommends that for the alternative school achievement profile the Board adopt the calculation of scale score points dropout rates and adequate yearly progress (AYP) using the same methods and parameters approved September 16, 2003.
- (C) The ADE recommends that the Board adopt the recalculation of AIMS scale score points for underperforming alternative schools described above.
- (D) The ADE recommends that the Board adopt the policy that if the recalculation of AIMS scale score points using the methodology described above results in sufficient scale score points for a school to not be labeled “underperforming” that the school receive a “performing” label.

V. CLASSIFICATION SCALES FOR ALTERNATIVE SCHOOLS

ADE proposes the following classification scales for alternative schools. Separate classification scales are used for high schools and elementary schools due to extra points being available to high schools from the dropout rate. The scale score points are roughly equivalent to expecting an alternative school to attain baseline group two in all subject/grade categories. This implies that the school performance of students on AIMS would lie between the 10th and 24th percentiles of schools in the state in 2000-2001.

Table 4. Alternative School Classification Cut Points					
		Subject/Grade Combination 1	Subject/Grade Combination 3	Subject/Grade Combination 6	Subject/Grade Combination 9
358 Schools	Underperforming	< 2.0	< 5.0	< 11.0	< 16
	Performing	2.0	5.0	11.0	16
High Schools	Underperforming	<2.0	<6.0	<12.0	<18.0
	Performing	2.0	6.0	12.0	18.0

BOARD ACTION:

- (E) The ADE recommends that the Board adopt for the evaluation of alternative schools the school classification scales given in Table 4.